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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,657	10/17/2003	John V. Marlow	T8465812US1	9797

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EXAMINER	
ASHLEY, BOYER DOLINGER	
ART UNIT	**PAPER NUMBER**
3724	

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/686,657	MARLOW ET AL.	
	Examiner	Art Unit	
	Boyer D. Ashley	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 9-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 9-21 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10/17/03.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to applicant's preliminary amendment filed 10/17/03, wherein claims 1-8 were deleted; claims 9, 15, 18-23 were amended. All of the claims 15-21 are improper for being dependent upon canceled claims. The examiner believes the applicant's intended to delete these claims as well. In any event, the examiner has not address these claims under prior art because the examiner is unclear how to or what is really intended by the applicant because there are no method claims in the application. The examiner cannot simple reassign them to another current claim because they would be improper for other reasons. Applicant is requested to address these in subsequent responses.

Priority

2. Acknowledgment is made of applicant's claim for domestic priority to application 09/773580, of which the instant application is a divisional of.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

In this case, the disjunctive "or" between the statutory classes in Section 101 sets forth the statutory classes in the alternative and precludes a single claim which embraces or overlaps two different statutory classes. See *Ex parte Lyell*, 17 USPQ2d 1548 (BA&I 1990).

1. Claims 15-17 are rejected under 35 U.S.C. ' 101 because it overlaps two different statutory classes and it is unclear if what the applicant is claiming, whether an apparatus or a method. It appears that the specific language of claim 15 encompasses both method and apparatus.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims 15-19, are dependent upon delete claims and therefore unclear as to how they further define the delete claim.

Moreover, claims 15-17 are indefinite because it is not clear if these are apparatus claims or method claims.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Benton, U.S. Patent 2,748,863.

Benton discloses the same invention as claimed including: a pair of opposed rolls (12, 13) having cutting blades (30) on at least one roll (12); means for journaling the rolls in operative abutment with each other (see Figure 1, wherein two shafts are shown for the rolls as well as lever arm for moving one roll relative to the other); conveying means (16-22 and 27-29) for continuously passing a workpiece between the rolls; and heat means for heating the blades and rolls to a temperature above about 150 degrees Celsius (see column 3, lines 55-65).

As to claims 10-11, Benton discloses a heating means for around 400 degrees Fahrenheit depending upon the speed of the web.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 9-11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (see specification pages 1-4 and Figures 1-3), hereinafter AAPA, in view of Roberts et al., U.S. patent 3,856,135, and Chen et al., U.S. Patent application 2002/0124388.

AAPA discloses the invention substantially as claimed, as explained in the instant application on pages 1-4, including the steps of cutting papered batter plates as well as teaching the need for a method of cutting paperless battery plates. However, AAPA

lacks the specific method of cutting paperless battery plates with a heat blade at a temperature of at least about 150 degrees Celsius to prevent the paste from sticking to the blade.

Chen et al. discloses that it is old and well known in the art to use paperless battery plates for the purpose of maximize productivity and flexibility of the manufacturing process as well as benefiting the initial electrical performance of the batteries. Roberts et al. discloses that it is old and well known in the art to heat elements that come into contact with the paste for the purpose of preventing the paste from sticking to the elements. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use paperless battery plates that can be cut using a heated blade in order to increase the initial electrical performance of the batteries.

The modified device of AAPA discloses the invention substantially as claimed except for the specific heated temperature of at least 150 degrees Celsius or to a range of 160 to 300 degrees Celsius or to a range of 180 to 210 degrees Celsius for the cutting die roll and the anvil roll. However, it would have been obvious to one of having ordinary skill in the art at the time of the invention was made to heat the cutting device/cutting roll to 150 degrees Celsius or within the range of 160 to 300 degrees Celsius for the purpose of ensuring the cutting device is heated enough to prevent the paste from sticking, because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routing skill in the art.

10. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Roberts et al. and Chen et al. as applied to claims 9 and 10 above, and further in view of Benton.

The modified device of AAPA discloses the invention substantially as claimed except for: heating means mounted axially in each of the rolls along the length of the rolls; however, Benton discloses that it is old and well known in the art to use heating means (see column 2, lines 55-70) disposed lengthwise in a roll for the purpose of facilitating the heating of the cutting blades and the roll. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use a heating means disposed within and extending the length of the rolls of AAPA in order to facilitate heating the rolls and blades. Moreover, it would have been obvious to one having ordinary skill in the art at the time the invention was made to an additional heating means in the other roll for the purpose of providing an enhanced heating means for the rolls such that the workpiece is properly heated as well as for preventing the paste from sticking to the rolls as well as the blades as taught by Roberts et al., because it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

As to claim 13, it should be noted that Benton discloses that the heating means is electrical (see column 3, lines 30-50) and therefore, the modified device of AAPA discloses the use of heating means powered by electricity.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boyer D. Ashley whose telephone number is 703-308-1845. The examiner can normally be reached on Monday-Thursday 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 703-308-1082. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Boyer D. Ashley
Primary Examiner
Art Unit 3724

BDA
May 16, 2004